

Remarks

Claims 1-6, 14-17, and 19-23 were previously pending in the application. In the present response, Claims 2 and 3 have been canceled. Accordingly, after entry of the response Claims 1, 4-6, 14-17, and 21-23 will remain pending. Reconsideration is respectfully requested based on the following remarks.

Drawings

The drawings were objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spacer having a height larger than the protrusion must be shown or the feature(s) canceled from the claim(s).

In this regard, Applicants have included a “**replacement sheet**” showing Figure 4 including spacer 320 “having a height larger than the first protrusion and disposed on the same layer as the first protrusion” as disclosed in paragraph [0011] of Applicants’ original specification.

Claim Rejections 35 U.S.C. §103

Claims 1-6, 14-17, and 21-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takeda et al. (U.S. Patent No. 7,224,421), herein referred to as “Takeda”, in view of Sasaki et al. (U.S. Patent No. 6,038,006), herein referred to as “Sasaki”.

Claims 19 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takeda, in view of Sasaki, and further in view of Nonaka et al. (U.S. Patent No. 6,897,918), herein referred to as “Nonaka”.

Of the above-referenced claims, Claims 1 and 14 are independent. Accordingly, once allowability of these claims is established, all claims depending therefrom are likewise allowable.

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Claims 1 and 14 recite, “a first protrusion formed directly on at least a portion of the first passivation layer”. In this regard, Applicants disclose, “A passivation layer 180 is formed on the data lines 171 and drain electrodes 175, and exposed portions of the semiconductor stripes 151” [¶0083], “A plurality of protrusions 280 are formed on the passivation layer 180 opposite the data lines 171” [¶0085], and “[T]he protrusions 280 give pretilt angles to the LC molecules to facilitate the tilt of the LC molecules. In addition, the protrusions 280 may strengthen the horizontal component of the primary field” [¶0104]. In other words, as shown in Figure 4, Applicants’ protrusions 280 are used to effect or influence the orientation of the LCD molecules positioned between a pair of panels. In this regard, the use of protrusions and/or cutouts may be used to enlarge the viewing angle of the LCD device.

In rejecting Claims 1 and 14 the Examiner indicated that, “Sasaki et al. figure 2 does disclose a first protrusion (34) can be formed directly over a first passivation layer (32) over a data bus line (23)” (page 3 of the Office Action).

Applicants respectfully disagree. Reference (34) as disclosed by Sasaki is a black matrix that is disposed on a portion corresponding to the data line, not in the cutout of the pixel electrode as recited in Claim 14. The black matrix (34) of Sasaki functions as a “light shield”, not as an element that influences the pretilt angle of LCD molecules. For the Examiner to simply choose any element of a display device formed on the passivation layer and then call the element a protrusion is inappropriate. According to the Examiner’s logic, a pixel electrode or even the LCD molecules themselves might be considered protrusions formed on the passivation layer. A protrusion and a black matrix are entirely different elements having entirely different functions within a display device. As often as protrusions

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and a black matrix are used together in a display device it is difficult to justify that they are the same element.

For at least this reason, Applicants respectfully submit independent Claims 1 and 14, and all claims depending therefrom are patentable.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a).

Conclusion

In view of the remarks set forth above, it is submitted that the application is now in condition for allowance, notice is respectfully requested by the Examiner. If the Examiner has any questions or concerns, a telephone call to the undersigned at (949) 752-7040 is welcomed and encouraged.

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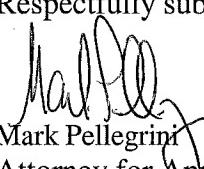


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Date of Signature

Respectfully submitted,



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